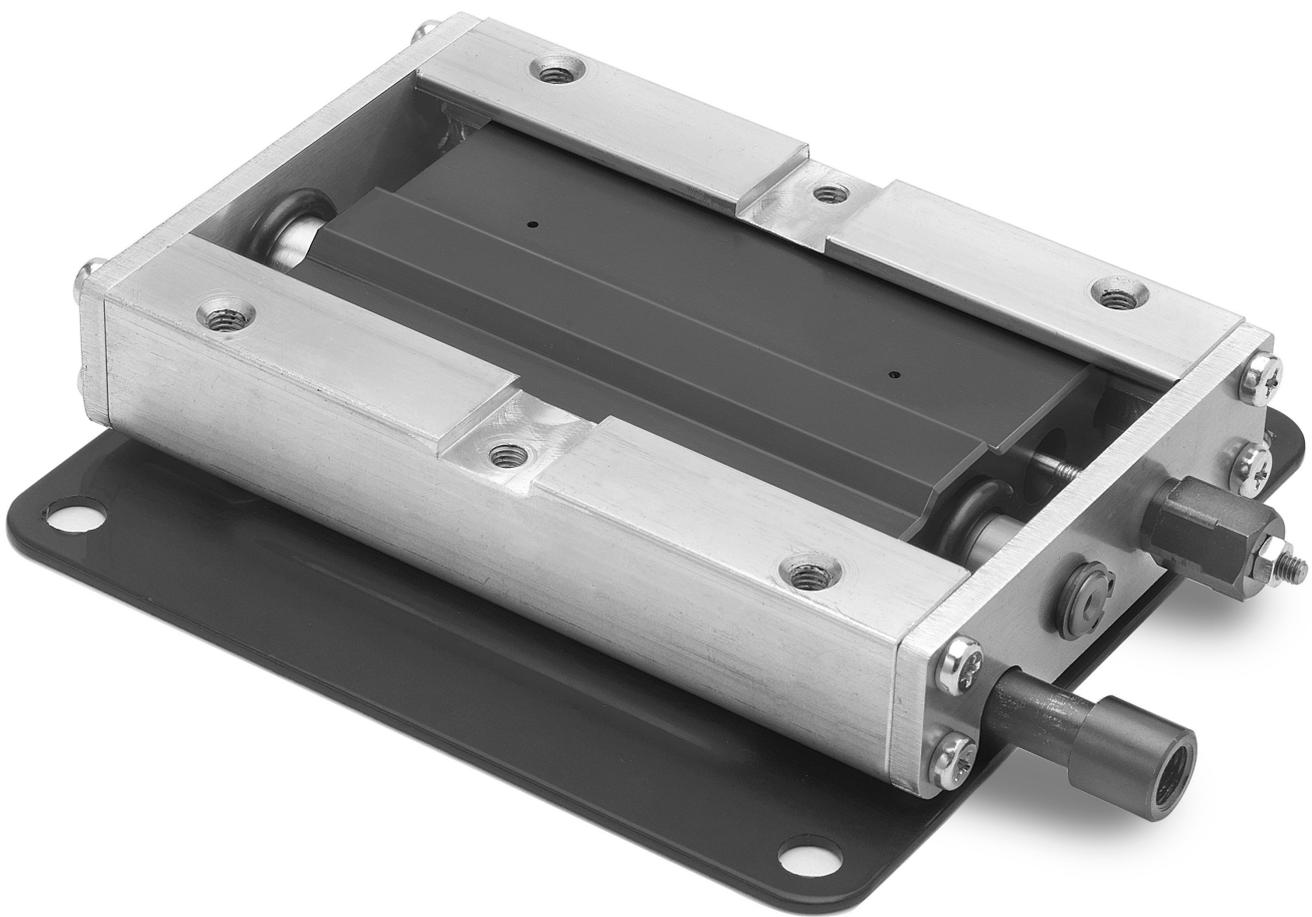




MECTOOL

MADE IN SWEDEN



FRICION TRANSPORTER TP 3

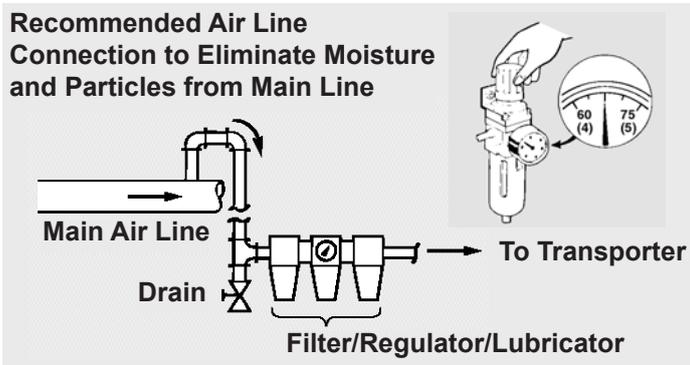
INSTALLATION & SERVICE MANUAL



1. Rigidly mount the Transporter to a solid surface using these recommended bolt sizes:

| Model | Quantity | Metric | Inch |
|-------|----------|--------|------|
| TP3 | 4 | M8 | 5/16 |
| TP10 | 4 | M8 | 5/16 |
| TP40 | 2 | M10 | 3/8 |
| TP70 | 6 | M8 | 5/16 |
| TP140 | 6 | M8 | 5/16 |

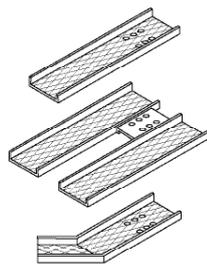
2. Air line requires use of an oil mist-type combination filter/regulator/lubricator, and pressure gauge. Set pressure to 4-5 bar (60-75 psi). Do not exceed 5.5 bar (80 psi) as excess pressure will damage the Transporter.



3. Fill the lubricator with a good grade of hydraulic oil such as Shell Tellus 32 or equivalent. Set the lubricator for one (1) drop per minute.

4. Connect the air line with flexible poly-flow tubing into the threaded inlet. On model TP3 use 1/4" tubing for 1/8" NPT. Models TP10, TP40, TP70 and TP140 use 3/8" tubing for 1/4" NPT.

5. A custom "U" profile tray or chute must be designed to handle each specific application or tool. Any material can be used but we recommend aluminum or any light gauge material to reduce tray weight. Maximum tray weight should not exceed the following table data:

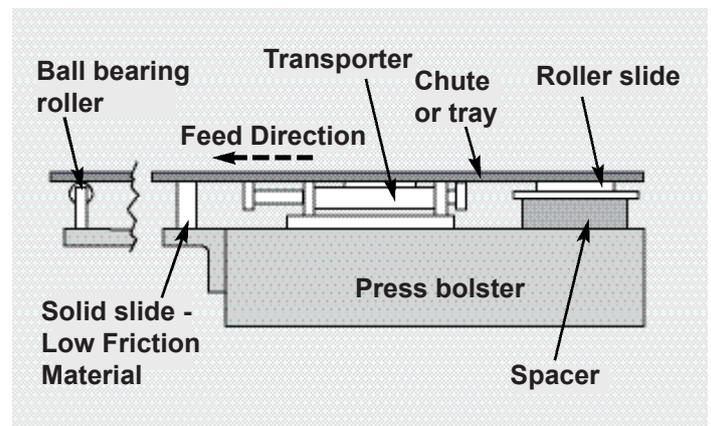


| Model | Max. weight tray only | | Max. weight of parts | |
|-------|-----------------------|------|----------------------|------|
| | Kg | Lbs. | Kg | Lbs. |
| TP3 | 1,5 | 3,3 | 3 | 6,6 |
| TP10 | 3 | 6,6 | 10 | 20 |
| TP40 | 15 | 33 | 40 | 80 |
| TP70 | 50 | 110 | 70 | 140 |
| TP140 | 100 | 200 | 140 | 300 |

6. Fasten the tray or chute to the Transporter with metric screws at all holes. Be sure to use spacers or washers between the Transporter and the tray to reduce contact friction between the moving tray and the Transporter body. Refer to the following table:

| Model | Quantity | Screw size | Depth |
|-------|----------|------------|-------|
| TP3 | 6 | M6 | 8 mm |
| TP10 | 6 | M6 | 8 mm |
| TP40 | 6 | M8 | 9 mm |
| TP70 | 6 | M8 | 8 mm |
| TP140 | 6 | M8 | 8 mm |

7. The conveyor tray or chute must be supported at both ends to minimize vibration and deflection. A block of Delrin GP-500 or Nylon, low friction material can be used for the tray to slide.



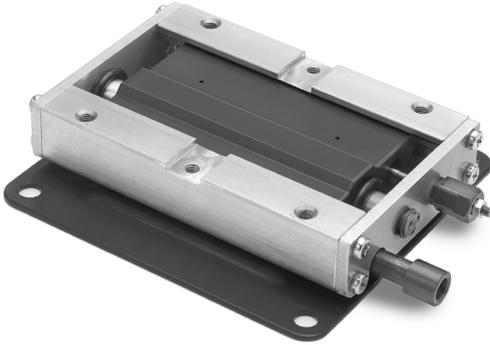
8. The speed adjustment is preset at the factory with the correct frequency for a lightweight tray or chute. The speed can be adjusted by turning the screw or knob clockwise to decrease the movement on the models TP3, TP10 and TP40. The TP70 and TP140 are adjusted by turning the screw or knob counter-clockwise to decrease the movement. Maximum speed is not required to move parts or scrap efficiently.

9. If the TP40 speed frequency is inadequate, release the air regulator rod 40-029 and gently push forward to increase speed or backwards to decrease.

10. The TP10 may require a slight adjustment to maintain proper speed frequency after a period of operation. If speed adjustment screw 10-405 does not slow the unit sufficiently, it may be necessary to slightly snug the two screws at the air regulator valve 10-603. This reduces the air being released from the valve and decreases speed. Snugging the screws too tightly will cause bending of the air regulator rod and poor performance.

11. Spray the same Tellus oil used in lubrication on the pistons every week.

12. If there is a build-up of sticky oil on the conveyor tray or if the scrap parts are very oily, they may stick to the surface and reduce movement. To reduce friction, try dimpling the surface of the conveyor chute with a ballpeen hammer or use a different material like expanded metal or profiled, roll-formed material.



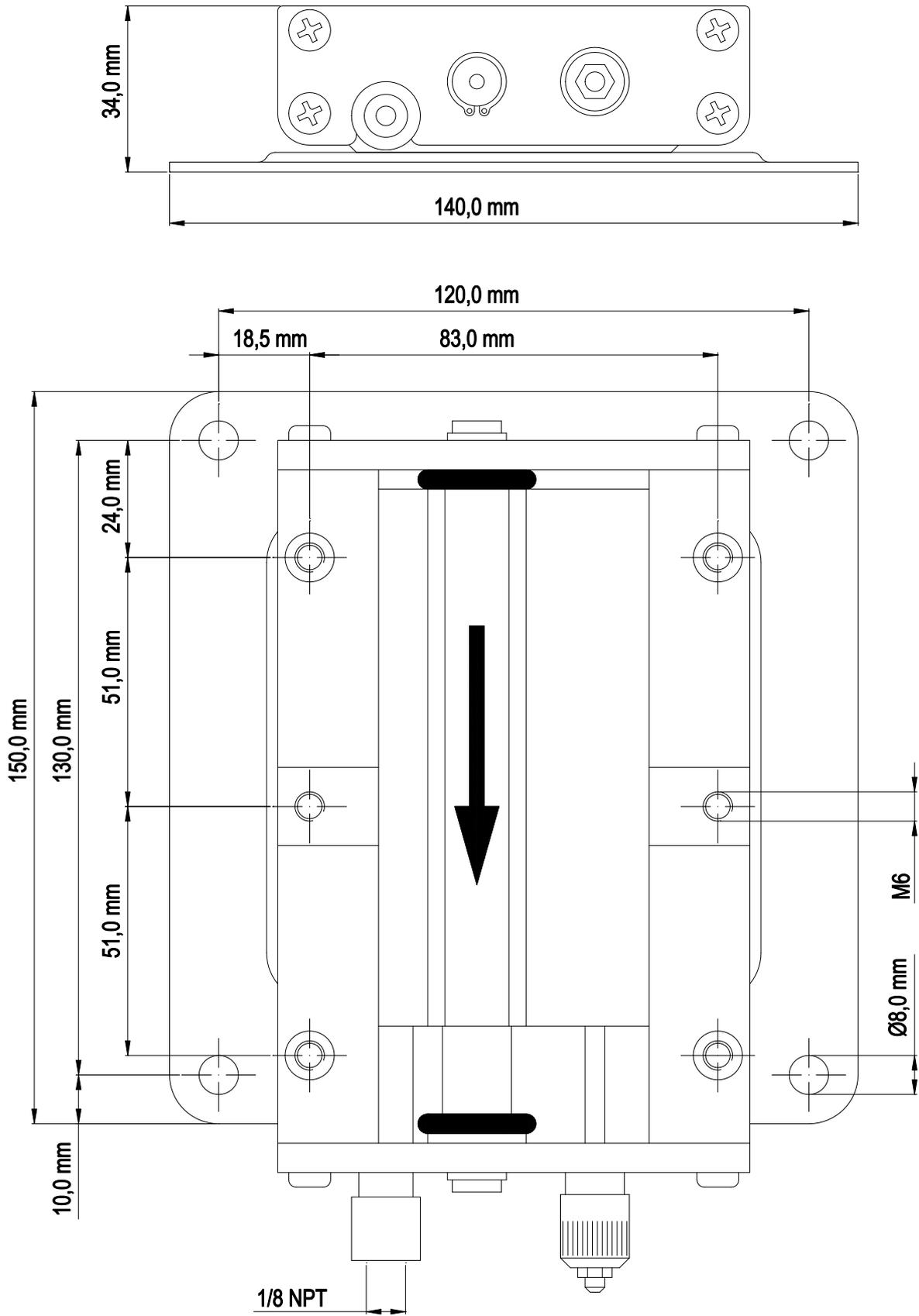
Please note that some parts may not be available because they are not field replaceable. If this is the case, a subassembly must be used. Some parts are only available as a subassembly and cannot be purchased individually. Check the spare parts reference lists for details.

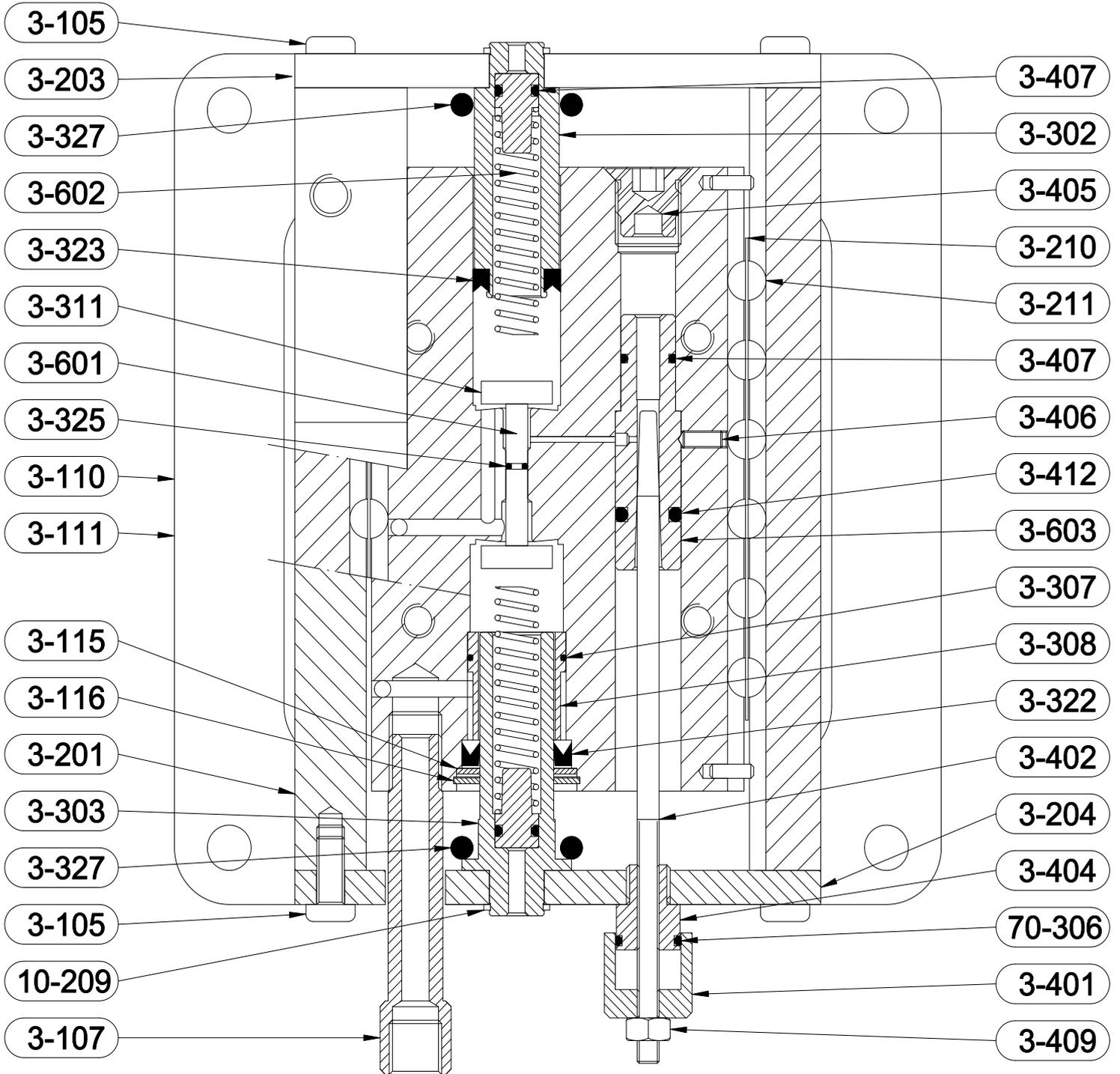
Disassembly.

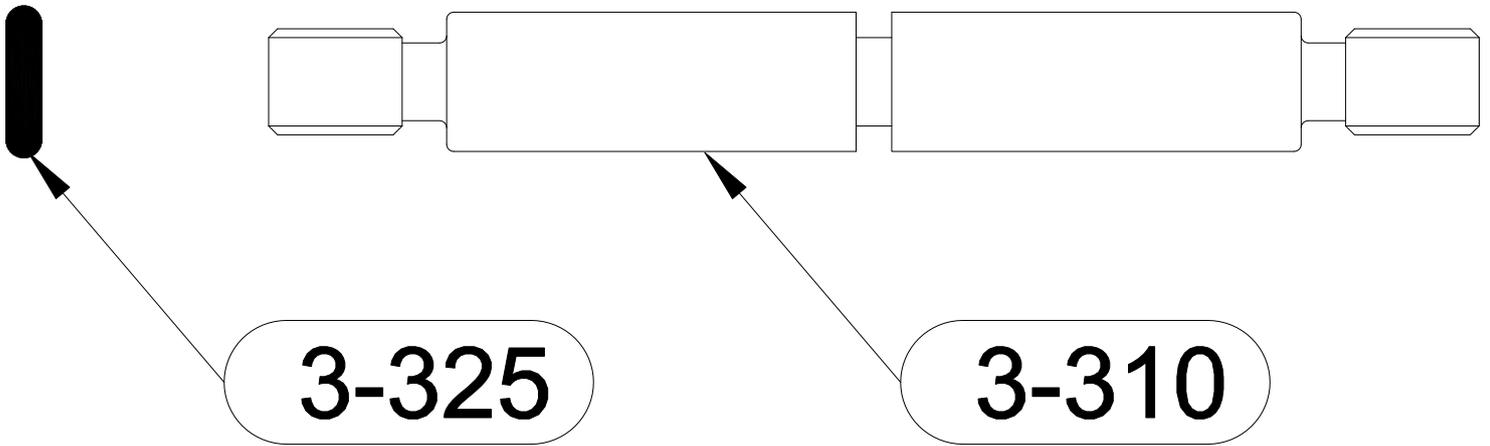
1. Remove both circlips 10-209 and push the front and rear pistons inside the machine body.
2. Remove the screws from the rear guide holder 3-204. Pull out together with speed adjustment knob 3-401.
3. Remove the front guide holder 3-203.
4. Remove both guide holders (L & R) 3-201 and the twelve (12) ball bearings 3-211.
5. Remove the locking screw 3-406 then remove the speed adjustment valve 3-603.
6. With both 3-701 tools provided in the repair kit, remove the valve discs 3-311 and the valve rod 3-310.
7. Check all O-rings, springs, discs and seals for damage and replace as needed.

Reassembly.

1. Install the speed adjustment valve 3-603 and align with the groove for locking screw 3-406.
2. Insert the front piston 3-302 into the machine body with the O-ring 3-327.
3. Mount the O-ring 3-327 and insert the rear piston 3-303 into the machine body.
4. Grease both guide holders 3-201 and put twelve (12) ball bearings 3-211 into both bearing plates 3-210. Hold the guide holders by hand while attaching the front and rear holders. **The guide holder assembly must run smoothly in both directions without side-to-side play.**
5. Put both pistons 3-302 and 3-303 back into position and secure the circlips 10-209.

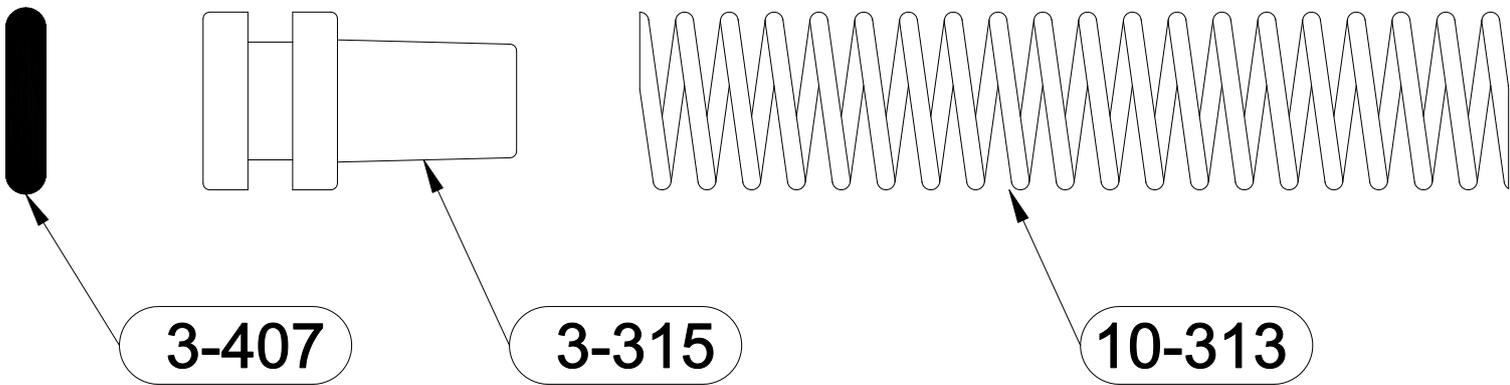






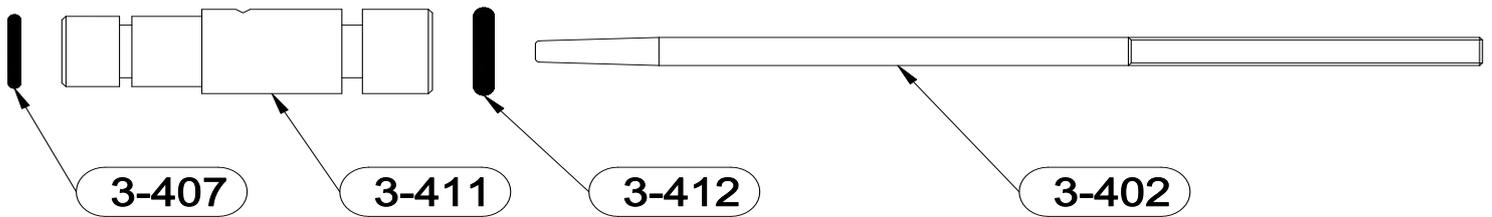
| Part No. | Description | Qty |
|-----------------------|-------------|-----|
| 3-310 | Valve rod * | 1 |
| * Not sold separately | | |

| Part No. | Description | Qty |
|----------|-------------|-----|
| 3-325 | O-ring | 1 |



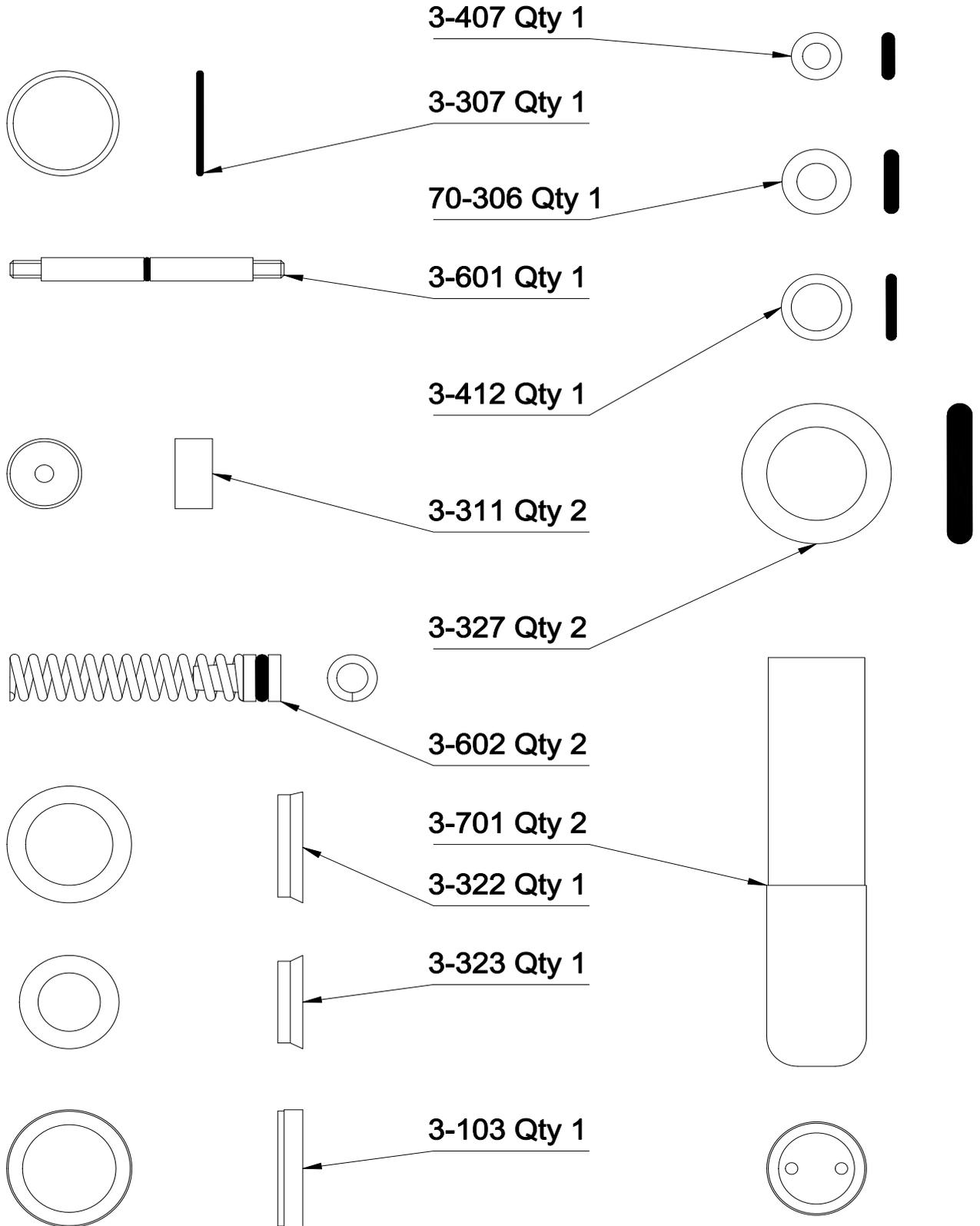
| Part No. | Description | Qty |
|-----------------------|-----------------|-----|
| 3-315 | Spring holder * | 1 |
| 3-407 | O-ring | 1 |
| * Not sold separately | | |

| Part No. | Description | Qty |
|----------|-------------|-----|
| 10-313 | Spring | 1 |
| | | |
| | | |



| Part No. | Description | Qty |
|-----------------------|-------------|-----|
| 3-402 | Valve rod * | 1 |
| 3-407 | O-ring | 1 |
| * Not sold separately | | |

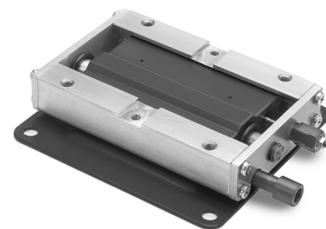
| Part No. | Description | Qty |
|----------|-------------|-----|
| 3-411 | Valve * | 1 |
| 3-412 | O-ring | 1 |





TP 3

| | |
|----------------------------|--------------|
| Air pressure | 4 - 5,5 bar |
| Air consumption | 5 l/min |
| Length of stroke | 23 mm |
| Rate of feed | 8 - 10 m/min |
| Max gradient on feed chute | 8 ° |
| Sound level | 56 dB (A) |
| Weight | 1,5 kg |
| Transportation capacity | 3 kg |
| Max weight chute | 1,5 kg |



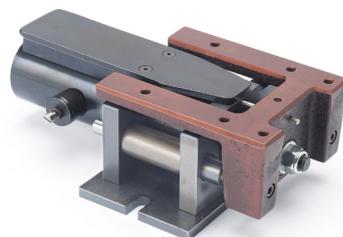
TP 10

| | |
|----------------------------|--------------|
| Air pressure | 4 - 5,5 bar |
| Air consumption | 11 l/min |
| Length of stroke | 23 mm |
| Rate of feed | 8 - 10 m/min |
| Max gradient on feed chute | 8 ° |
| Sound level | 60 dB (A) |
| Weight | 3 kg |
| Transportation capacity | 10 kg |
| Max weight chute | 3 kg |



TP 40

| | |
|----------------------------|--------------|
| Air pressure | 4 - 5,5 bar |
| Air consumption | 31 l/min |
| Length of stroke | 27 mm |
| Rate of feed | 8 - 10 m/min |
| Max gradient on feed chute | 8 ° |
| Sound level | 68 dB (A) |
| Weight | 8,5 kg |
| Transportation capacity | 40 kg |
| Max weight chute | 15 kg |



TP 70

| | |
|----------------------------|--------------|
| Air pressure | 4 - 5,5 bar |
| Air consumption | 44 l/min |
| Length of stroke | 27 mm |
| Rate of feed | 8 - 10 m/min |
| Max gradient on feed chute | 8 ° |
| Sound level | 68 dB (A) |
| Weight | 6 kg |
| Transportation capacity | 70 kg |
| Max weight chute | 50 kg |



TP 140

| | |
|----------------------------|--------------|
| Air pressure | 4 - 5,5 bar |
| Air consumption | 42 l/min |
| Length of stroke | 27 mm |
| Rate of feed | 8 - 10 m/min |
| Max gradient on feed chute | 8 ° |
| Sound level | 62 dB (A) |
| Weight | 8,5 kg |
| Transportation capacity | 140 kg |
| Max weight chute | 100 kg |





Factory repair service.

If your Transporter requires repair, return it to our Service Center. A technician will examine your Transporter and get back to you with a quote of estimated costs.

Repairs include fault tracing and repair or replacement of failed components, as well as final testing to ensure your Transporter is functioning according to specifications.

All items with the warranty period are evaluated by technicians to verify warranty eligibility.

All Transporters repaired by Mectool receive a new three month manufacturer's warranty period (wear parts excluded).

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EC DECLARATION OF CONFORMITY FOR MACHINERY

Original

Directive 2006/42/EC, Annex II 1A

Manufacturer (and where appropriate his authorised representative):

Company: Mectool Sweden AB
Address: Box 132, 293 23 Olofström

Hereby declares that:

Type of machinery: Friktionstransportör
No. of machinery: TP-3, TP-10, TP-40, TP-70, TP-140, TPE-15, TPE-100

Complies with the requirements of Machinery Directive 2006/42/EC.

Complies also with applicable requirements of the following EC directives:

2014/30/EU, EMC (elektromagnetisk kompatibilitet)

The following harmonized standards have been applied:

SS-EN ISO 12100 (Maskinsäkerhet, allmänna konstruktionsprinciper - Riskbedömning och riskreducering)
SS-EN 13857 (Skyddsavstånd)
SS-EN 60204-1 (Maskiners el-utrustning)

The following other standards and specifications have been applied:

Authorized to compile the technical file:

Name: Kenneth Brodin
Address: Mectool Sweden AB, Box 132, 293 23 Olofström

Signature:

Place and date:

Olofström 2021-01-12

Signature:



Name: Kenneth Brodin

Position: VD